Shropshire Entomology

A bi-annual newsletter focusing on the study of insects and other invertebrates in Shropshire (Vice County 40)

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Welcome

Welcome to the 11th edition of *Shropshire Entomology*. We've missed an edition for autumn 2015, but hope now to issue two editions each year.

This edition includes some County Recorder reports for 2015 and the usual mix of other articles. Please do continue to submit your notes and articles. We are particularly keen to receive notes of new species for Shropshire. The deadline for the next edition, to be published July/August is 30 June 2016 at vc40insects@talktalk.net

Nigel Jones and Gordon Leel

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Past newsletters are still available for download as PDFs from www.invertebrate-challenge.org.uk/newsletters-and-resources.aspx

Submission guidelines for articles

Please wherever possible state authors for key species mentioned in the article eg. *Phaeostigma notata* (Fabricius, 1781)

Photographs should ideally be above 200kb in size. We may crop photos to fit. Please provide the photographer's name or the source of the photograph.

Please send text in a word file. Only use capital letters for site or people's names. Lower case letters should be used for vernacular or common species names except for those named after someone e.g.; Fallen's leatherbug.

Many thanks, the Editors

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Terrestrial Hempitera – new to Shropshire (VC40) in 2015

Keith Fowler

The year started with some data mining of the NBN Gateway and SEDN where I found a lot of records that were not on the county lists. This was not a surprise as far as the NBN was concerned but records on the SEDN that I did not know about did take me aback. These searches may result in the addition of a further 21 species to the county lists – something for me to pursue this winter!

Turning to the new records that I have received so far in 2015 I am pleased that we have recorded a further 23 new species (plus one probable), subject to acceptance of the National Recorders.

***Scolopostethus pictus* (Schilling, 1829) (Hemiptera: Lygaeidae)**

This ground bug was beaten out of leaf litter at the side of a path running by the Rea Brook in Meole Brace by Nigel Cane-Honeysett on 10 April 2014. What is it doing as a new species in 2015 you may well ask? This is a scarce species with only fifteen records held on the NBN Gateway, all of which are south of the line from the Severn Estuary to The Wash. So, naturally, there was some doubt about its initial determination. This was resolved in February this year when Peter Kirby confirmed its identification at the 2015 Hemipterists' Day.

***Lygus maritimus* Wagner, 1949 (Hemiptera: Miridae)**

Another species that turned up in 2014 but was only identified in 2015. There are five species of *Lygus*. Until I found this bug on a SIG visit to Flounders' Folly on Callow Hill last September every one I had found was the common *Lygus rugulipennis*. I knew that this specimen was not *L. rugulipennis* but could not determine which of the other four species it was. Jim Flanagan, the National Recorder, came to my rescue and identified it. As the name suggests it is a species associated with coastal and sandy regions.

Aphalara* cf. *polygoni Förster, 1948 (Hemiptera: Psyllidae)

I beat a female from bilberry on St. Lawrence Hill, Ercall on April Fool's day this year. Unfortunately the female is indistinguishable from the very rare *A. borealis*. The NBN shows 7 records for *A. polygoni* and zero for *A. borealis*.

***Linnavuoriana sexmaculata* (Fallén, 1806) (Hemiptera: Cicadellidae)**

A male and female of this hopper were taken during the aborted Joy of Wildlife to Granville Country Park on 8 April 2015*. They were swept from the ivy growing on and around the lime kilns.

Linnavuoriana sexmaculata (photo: Tristan Bantock)

***Craspedolepta nebulosa* (Zetterstedt, 1828) (Hemiptera: Psyllidae)**

A female was swept from bugle in Abbey Wood, Lilleshall on 12 June 2015. *British bugs* states that its host is normally rosebay willowherb.

***Oncopsis avellanae* Edwards, 1920 (Hemiptera: Cicadellidae)**

This may or may not be a first record as the key I use most of the time (Le Quesne *et al.*, 1981) lists this species as a form of *O. carpini*. It was only recently that I noticed that they were given as separate species in the latest British List (Wilson *et al.*, 2015), so it is possible that it has been found before and recorded as *O. carpini*. The two are distinguished only on facial features and average size (but the sizes overlap). A pair were swept from alder at Lea Quarry, Wenlock Edge on 17 June 2015.

* An unfortunate event – see Keith's Joy of Wildlife meetings report on page 20.

***Eupteryx melissae* Curtis, 1837 (Hemiptera: Cicadellidae)**

This planthopper was found by Dan Knight on sage in his garden on 18 June 2015. He reported over 50 of them on a single plant.

***Cacopsylla fulguralis* (Kuwayama, 1908) (Hemiptera: Psyllidae)**

This species was swept in a garden in Madeley, Telford on 18 June 2015. It is an invasive species from Japan found on cultivated *Eleagnus* (*British Bugs*).

***Chloriona unicolor* (Herrich-Schäffer, 1835) (Hemiptera: Delphacidae)**

This species was swept from the marginal vegetation of Newport Canal on 19 June 2015. The distribution of this species on the NBN shows it as mainly coastal with a few records inland in East Anglia and an isolated record in Yorkshire.

***Eupteryx cyclops* Matsumura, 1906 (Hemiptera: Cicadellidae)**

A second new species found amongst the marginal vegetation alongside Newport Canal on 19 June 2015. British Bugs states that it is common in nettles in the north and in very wet conditions further south.

***Neocraspedolepta subpunctata* (Förster, 1848) (Hemiptera: Psyllidae)**

Dan Knight found this species on willowherb in Oswestry on 30 June 2015. He found a second example a few days later at Old Oswestry Racecourse.

***Sonronius dahlbomi* (Zetterstedt, 1840) (Hemiptera: Cicadellidae)**

Maria Justamond disappeared into the denser vegetation at the edge of Lower Shortditch Turbury SWT Reserve on the SIG visit to Mason's Bank on 12 July 2015 and returned with this hopper. I cannot recall if Maria told me where she found it but, according to *British Bugs*, it may be associated with rosebay willowherb or raspberry. The distribution shown on the NBN is eastern England with a few records from the wider Solent region.

***Orthotylus adenocarpi* (Perris, 1857) (Hemiptera: Miridae)**

This is one of the three species that are normally found on broom. This specimen was beaten from gorse at Bury Ditches on 22 July 2015.

***Tupiocoris rhododendri* (Dolling, 1972) (Hemiptera: Miridae)**

This bug found Pete Boardman as he relaxed in his garden of his home in Abdon on 23 July 2015. Fortunately Pete, ever ready for any invertebrate opportunity, was able to photograph it and later identify it as *T. rhododendri*.

The bug feeds exclusively on rhododendron and probably originated in America. Its black head and pronotum separated by a white collar, as Pete points out, make it resemble a man of the cloth.

***Eurhadina concinna* (Germar, 1831) (Hemiptera: Cicadellidae)**

This species was swept from oak along a ride in Abbey Wood, Lilleshall on 31 July 2015. The specimen I caught was a male so I was able to distinguish it from *E. ribauti* which is also found on oak.

***Edwardsiana rosae* (Linnaeus, 1758) (Hemiptetra: Cicadellidae)**

Whilst moth trapping in a garden in Church Preen on 3 August 2015 a non-descript yellow hopper landed on the trap. Not wanting to miss an opportunity I potted it and later found it to be

Tupiocoris rhododendri (photo: Pete Boardman)

this species. British Bugs say that it is common on roses (and other plants) so I was very surprised that it had not turned up before. I suppose the defence mechanism of a rose puts people off; I generally give it a wide berth. Later in the year I plucked up courage to beat a dog rose at Eastridge Wood and was rewarded with a second record and a bloodied finger.

***Erzaleus metrius* (Flor, 1861) (Hemiptera: Cicadellidae)**

This species was found in grassland in Lodge Field, Ironbridge on 5 August 2015. Reed canary-grass is the host, according to Nickel, in moderately wet to temporarily flooded, often eutrophic sites, mainly along ditches and shores of rivers and lakes, and in abandoned grassland, occasionally in meadows cut at most once a year.

***Rhytidodus decimusquartus* (Schrank, 1776) (Hemiptera: Cicadellidae)**

There are only 28 widely scattered records on the NBN for this species. This specimen was taken at a moth trap at the edge of the pool in the Beeches, Ironbridge on 7 August 2015. According to British Bugs it is found in the south on black and Lombardy poplars.

***Forcipata forcipata* (Flor, 1861) (Hemiptera: Cicadellidae)**

This was swept from wet grassland at Catherton Common on 12 August 2015. The NBN shows 16 records all south of the line from the Bristol Channel to The Wash. Nickel gives its host plants as various sedges and possibly grasses in open deciduous and coniferous woodland and along their margins in moist to dry sites.

***Kelisia ribauti* Wagner, 1938 (Hemiptera: Delphacidae)**

A second new species swept from wet grassland at Catherton Common on 12 August 2015. Another scare species according to the NBN (11 records), but with a very wide distribution. Nickel reports that it is found in peaty meadows, intermediate bogs and spring mires, also along the edge of raised peat bogs; its hosts are probably sedges.

***Parapiesma quadratum* (Fieber, 1844) (Hemiptera: Piesmatidae)**

This bug, according to British Bugs is found mainly associated with coastal saltmarshes feeding on oraches and sea purslane. But it is found inland and this one was swept from the marginal vegetation around one of the pools at Devil's Dingle, Buildwas on 26 August 2015. Unfortunately I did not note the species of plant present in the vegetation.

***Psammotettix nodosus* (Ribaut, 1925) (Hemiptera: Cicadellidae)**

This species was beaten from willowherb in the clear-felled regenerating heathland at the SWT Masons Bank Reserve on 9 September 2015. Nickel suggests that this is a pioneer species found on low growing grasses of various types of sites including forest clearings.

***Teratocoris saundersi* Douglas & Scott, 1869 (Hemiptera: Miridae)**

A female was swept from wet grassland in the Upper Unk wildlife site (on the opposite side of the road to Mason's Bank SWT Reserve) on 9 September 2015.

***Coranus subapterus* (DeGeer, 1773) (Hemiptera: Reduviidae)**

This assassin bug was found by Ben Waddams when investigating sundews on Whixall Moss on 8 October 2015. It had been recorded previously in the neighbouring Fenn's Moss.

References

British Bugs – www.britishbugs.org.uk

Le Quesne, W. J. and Payne, K. R. 1981. *Cicadellidae (Typhlocybinae) with a Check List of the British Auchenorrhyncha (Hemiptera, Homoptera), Handbooks for the Identification of British Insects Vol. II, Part 2(c)*. Royal Entomological Society of London, London.

Wilson, M., Stewart, A., Biedermann, R., Nickel, H. and Niedringhaus, R., 2015. *The Planthoppers and Leafhoppers of Britain and Ireland – Identification keys to all families and genera and all British and Irish species not recorded from Germany*. WABV, Germany.

Nickel, H., 2003. *The Leafhoppers and Planthoppers of Germany (Hemiptera: Auchenorrhyncha): Patterns and strategies in a highly diverse group of phytophagous insects.* Pensoft, Sofia.

Moths, moths everywhere – silky wainscot *Chilodes maritima* (Tauscher, 1806) new for Shropshire (VC40)

Mike Shurmer

Ask most moth trappers how they got on in 2015 and they will tell you that it was a poor season. The cold and damp weather over much of the year led to reduced catches and moth recording often seemed like hard work. In my All Stretton garden it was no exception, but the pattern of the year was broken in spectacular style on the night of 16 July. I had a busy weekend ahead and was working from home on Friday, so I decided to set the moth trap on Thursday night. Whilst it was a warm and cloudy forecast, there was a fair breeze, so I thought I would have plenty of time to go through the trap before starting work.

Confused 2015_07_16 (photo: Mike Shurmer)

As usual, I got out of bed at 5 am and went outside bleary-eyed to turn off and cover the trap, planning to get straight back into bed. As soon as I got outside, however, these plans were quickly shelved. There were moths everywhere, all over the lawn, on the garden furniture and the wall of the house. After a couple of hours picking up moths from the area around the trap and potting the interesting species, I checked to see what the totals were. It was 180 moths, and I had not even looked inside the trap! I had also run out of pots, and resorted to increasing levels of ingenuity to find secure ways of containing moths as they awaited identification.

Silky wainscot 2015_07_16c (photo: Mike Shurmer)

Going through the trap was quite an experience. There were *Chrysoteuchia culmella* (Linnaeus, 1758) flying out whenever I tried to grab a new egg tray, I recorded at least 113 of these, but dozens more must have evaded me. Large yellow underwing *Noctua pronuba* (Linnaeus, 1758), common footman *Eilema lurideola* (Zincken, 1817), dark arches *Apamea monoglypha* (Hufnagel, 1766) and heart & dart *Agrotis exclamationis* (Linnaeus, 1758) were all comfortably into double figures.

The undoubted highlight was the first confirmed silky wainscot *Chilodes maritima* for VC40. This is a wetland species with carnivorous larvae that predate insects within the stems of common reed *Phragmites australis*. Like many wetland species it is known to be quite dispersive, though there are no significant reedbeds within tens of miles of my garden. The identification was confirmed by Colin Plant, via Tony Jacques. Other scarce macro

Small emerald 2015_07_16 (photo: Mike Shurmer)

Exoteleia dodecella 2015_07_16 (photo: Mike Shurmer)

moths for VC40 included the confused *Apamea flava* ([Denis & Schiffermüller], 1775), a species I record in small numbers each year but has been rarely recorded elsewhere in VC40, small emerald *Hemistola chrysoprasaria* (Esper, 1795) and small dotted buff *Photedes minima* (Haworth, 1809).

Notable microlepidoptera included two *Exoteleia dodecella (*Linnaeus, 1758), confirmed by Steve Palmer at the Gelechid Recording Scheme. This species utilises Scots pine *Pinus sylvestris* and has only three previous county records up to 2014 (Blunt, 2014). Also recorded were *Epinotia abbreviana* (Fabricius, 1794), a species requiring elm (*Ulmus* sp.), *Blastodacna hellerella* (Duponchel, 1838) and *Epagoge grotiana* (Fabricius, 1781).

Of the moths I managed to record, and not including the tens of moths that must have escaped before they were logged, there were 600 moths of 128 species (including four aggregates). In total there were 17 new moths for the garden and although I had a few other decent catches in 2015, nothing can really compare to the night of 16 July.

References

Blunt, G. 2014. *The smaller moths of Shropshire: their status, distribution and ecology.* FSC Publications.

A new weevil species for Shropshire

Ian Thompson

The mistletoe weevil *Ixapion variegatum* (Wenker, 1864) (Col. Apionidae) was first found in Britain on an estate at Bromyard in Herefordshire in 2000. In 2004 it was found in Worcestershire.

This summer the Shropshire Invertebrate Group resumed its south Shropshire surveys of old orchards which contain mistletoe and the above weevil species was added (together with some mirid and psyllid bugs) to our list of target species.

Seven orchards at five properties were visited and evidence of the presence of the mistletoe weevil was found at all the sites, in all cases by discovery of the characteristic exit holes and leaf/stem dieback associated with this species. Occurrence appears to be at low densities.

Records to date suggest the weevil is long established but overlooked rather than being a recent arrival.

Diary dates

Shropshire Entomology Day

Field Studies Centre, Preston Montford

11th December 2016

An Introduction to Hoverfly Identification

Tutor: Nigel Jones

Where: The Gateway, Chester Street, Shrewsbury

When : Wednesday 25th May 2016, 10.00 am – 4.00 pm

How much: £45.00

Diptera Report 2015

Nigel Jones

2015 continued the apparent trend of fewer flies with each passing season. I have not met any dipterists who think the situation has improved for our Diptera fauna since things started to go badly after about 2007. Inevitably, as larger and showier groups such as hoverflies have plummeted in numbers, my attention has turned to smaller stuff and the rewards there have thankfully been pretty good. I expect the numbers of small fry have done badly too, but as so few people look at these, we have no way of knowing what the trend is.

But, to start with the "megafauna", Shropshire's showpiece hoverfly *Callicera rufa* Schummel, 1842 (Syrphidae) was noted for the fifth year running at both Little Hill (Keith Fowler gamely climbs this formidable slope each year to check on *C. rufa*) and Haughmond Hill. At Haughmond Hill I noted a male on 18 June on the usual tree trunk, and for the first time here, females were seen. Two were close by having a good look over a fallen pine tree, presumably looking for a suitable place to oviposit. On 27 May, on a largely cool and overcast day, I drove out to Oliver's Point, Nesscliffe Hill, where I previously had espied some potential *C. rufa* lekking trees at the edge of the hill. Sure enough, in a brief 15 minutes of sunshine I saw at least two males (possibly three or four) on the trunks of hilltop pines – amazing! This makes the fourth site in Shropshire for this magnificent hoverfly, making VC40 the epicentre of the known English population.

Birch shieldbug carrying eggs of *S. rotundiventris* (photo: Maria Justamond)

Sue Hiatt collected a *Platycheirus* in a garden at Trench on 17 August 2014, and found it was the very infrequently recorded *P. aurolateralis* Stubbs, 2002. This was a county first for Shropshire. Sue also took another county first, *Subclytia rotundiventris* (Fallén, 1820) (Tachinidae), from Coalmoor on 28 August 2014. We had suspected this parasitoid was present in Shropshire for a few years, as Maria Justamond photographed a birch shieldbug *Elasmostethus interstinctus* (Linnaeus, 1758) carrying what were almost certainly the eggs of *S. rotundiventris* at Merrington Green in 2012 (see photo). *S. rotundiventris* has been extending its British range north and west in recent years, and Shropshire is currently near the edge of its known north westerly limit.

Two more tachinid flies new to Shropshire were discovered in Longden Road Cemetery on 4 July: *Anthomyiopsis nigrisquamata* (Zetterstedt, 1838),

Trees (arrowed) at Oliver's Point on which male *C. rufa* were seen (photo: Nigel Jones).

was swept from poplar leaves. This is regarded as a Nationally Scarce species. *A nigrisquamata* is known as a parasitoid of the widespread leaf beetle *Phratora vitellinae* (Linnaeus, 1758) on aspen trees. There are very few recent records for this fly in Britain. Also swept from trees in the cemetery was *Catharosia pygmaea* (Fallén, 1815). This is one of our smallest Tachinidae and is a parasitoid of bugs in the family Lygaeidae. *C. pygmaea* was first discovered in Britain by Steven Falk in 1998 and he noted that the male engaged in wing waving displays, rather like Tephritid and other picture wing flies; very unusual for a tachinid. *C. pygmaea* has a strongly dark marked front edge to its wing. The trees in the cemetery also yielded another county first; the tiny, orange *Gymnochyromyia flavella* (Zetterstedt, 1848) (Chyromyidae). Flies of this family are generally associated with bird nests and are certainly part of the diptera microfauna. Sweeping leaves at height appears to be the best way to find these widespread but seldom recorded flies that sport bright golden-green eyes in life. Another new Shropshire species swept off the cemetery trees on the same day was *Phyllomyza securicornis* Fallén, 1823 (Milichiidae), a tiny fly in a seldom collected family.

I have long yearned to find the rare robberfly (Asilidae) *Dioctria cothurnata* Meigen, 1820, but had more or less given up on any hope of finding it. It is both unpredictable and very infrequent in its occurrence in Britain. On 26 June, towards the end of a rather long and disappointing day's fieldwork in a glorious looking location on the River Clun at Purslow, I half heartedly swept at a *Dioctria* flying low across a riverside meadow, almost hoping I would not catch it, to save me the bother of identifying it as the *D. rufipes* (De Geer, 1776) or *D. linearis* (Fabricius, 1787) that they most often turn out to be. Once it was in the net I puzzled over it and could not think which of the usual bunch it was, so I popped it in a tube and took it home. The rest of the story will be obvious. This is a grand find; the NBN displays just five post-2000 localities for this rarity, mainly in Scotland and Cumbria/ Lancashire. There are a couple of pre-1980 records from Herefordshire and no others at all in the Midlands, so I am mightily pleased to have added *D. cothurnata* to Shropshire's Diptera list.

Even though I made relatively few trips to Devil's Dingle, Buildwas in 2015 it still furnished us with another county first; the Nationally Scarce soldierfly (Stratiomyidae) *Oxycera pardalina* Meigen, 1822. On 17 July I swept a single female from trees above a ditch at the edge of a wood at the top of the site. Another scarce soldierfly, *Neopachygaster meromelas* (Dufour, 1841) was reared from detritus collected from beneath a dead poplar on Meole Brace golf course, making a second county record for this nationally scarce fly. The same dead poplar medium also provided the rare Near Threatened status (the old RDB) Muscid fly *Phaonia canescens* Stein, 1916. Another county first.

The diminutive *Acartophthalmus bicolor* Oldenberg, 1910 (Acartophthalmidae) is one of only two members of its family in Britain, so finding it at Shrugg's Coppice, Nesscliffe Hill not only added it to the Shropshire list, but meant that I have now seen half of the British species in this family! A very gratifying three new Sciomyzidae (snail-killing flies)

Sciomyza dryomyzina collected from the River Perry at Yeaton (photo: Nigel Jones).

were discovered in Shropshire during 2015. The most exciting was the rare *Sciomyza dryomyzina* Zetterstedt, 1846. A single female of which I swept from riverside wetland on the River Perry, Yeaton on 27 July 2015. *Pteromicra angustipennis* (Staeger, 1845) is a small sciomyzid of which a single specimen was collected from Bettisfield Moss on the SIG field trip there on 17 May. As we all know, Devil's Dingle always comes up trumps and it duly provided a first county record for the Nationally Scarce *Colobaea punctata*, on 17 July.

Following 2014's intensive survey of the Reabrook Valley in Shrewsbury, there is still county first treasure to find there. In 2015 I swept the Nationally

Scarce dolichopodid *Dolichopus argyrotarsis* Wahlberg, 1850 from the streamside on 21 June.

The toad parasite *Lucilia bufonivora* Moniez, 1876 (Calliphoridae) is seldom recorded in Britain and had not been found in Shropshire until I swept one from Big Wood, Eaton Mascott on 11 May.

Coenosia stigmatica Wood, 1913 has tiny spines along the anterior of its thorax which should make it easy to determine, but I had to take two specimens to Oxford Univeristy Museum to compare them with the Museum's world collection of Muscidae. This is such a scarce fly that the collection contained just three specimens, but Adrian Pont, a leading authority on Muscidae, was able to confirm my determination. Records from Venus Bank (30 September 2015) and Stevenshill, Cound (17 August 2011) were Shropshire firsts. Incidentally, Henry Wood, an entomologist who practised in neighbouring Herefordshire, first described this species from that county.

Hollies Wood, Haughmond Hill almost gave Shropshire a British first. The Lonchaeid *Protearomyia withersi* MacGowan, 2014 was split from *P. nigra* Meigen, 1826 last year. I got wind of the split and duly found that most of the *P. nigra* I had collected previously at Haughmond were in fact *P. withersi*. These records were thus included in Iain MacGowan's paper introducing the species to the British list (MacGowan, 2014). In 2015 I swept eight more male *Protearomyia* at the same site, all from one small group of trees at the woodland edge on 26 May. There were four each of *P. withersi* and *P. nigra*, so they evidently fly at very much the same time in the season, and in the same situation.

Finally, Hollies Wood at Haughmond Hill provided a single *Chalarus pughi* Coe, 1966 (Pipunculidae) on 30 June 2015. Not only is this a county first, but it is a species named after Shropshire's pioneering Dipterist C. H. Wallace Pugh. Hollies Wood was subject to a fairly intensive survey of Diptera during 2015 and numerous Shropshire firsts and exciting species have been discovered there. These will be summarised in the next *Shropshire Entomology*.

Reference

MacGowan, I. (2014) *Protearomyia withersi* MacGowan (Diptera, Lonchaeidae) new to the British Isles, *Dipterists Digest* 2015, Vol. 22 No. 1 pp 17-20.

A Shropshire springtail atlas

Pete Boardman

The Collembola (springtails) are an interesting group of invertebrates that surround our every move and are ubiquitous in our wildlife habitats, our gardens, our pot plants, even our sewage processing plants etc, and indeed anywhere you can think of. They occur in large numbers in soil, dead wood, in leaf litter, on higher plants, mosses and lichens, on the water surface of ponds and puddles, and even rock pools at the coast. They turn up indoors (one recently wandered across my field of view when I was looking at a fly under the microscope) and can readily be found anywhere outside once one learns to view the world at the scale of a springtail. Despite their ubiquity they are a group of invertebrates most people are completely ignorant of, even the majority of entomologists. Therefore following some time looking at them during 2015 and recording some of them, several of us have decided that a good way of taking this study forward in Shropshire is to put together a distribution atlas. Thanks to the encouragement of Rich Burkmar and Charlie Bell from the tom.bio project, based in FSC Head Office at Preston Montford, we can announce the beginning of this project.

We came into 2015 with virtually no records on the SEDN database of springtails but thanks to some generous support from the Shropshire Ecological Data Network, and recorders (in particular Sue and Gywn Hiatt) we have been able to assemble just

Springtail *Dicyrtomina ornata* (photo: Pete Boardman).

under 1,000 records of approximately 60 species of Collembola for the county. This will act as a baseline for the Atlas project and the idea is to try and add a minimum of another 1,000 records by the end of 2016. How will we do this? Well we hope to implement several methods in which willing volunteers can take part. These will take the form of the noting those species easily identifiable by hand lens, mass sampling and sorting of soil cores by use of a multi-Tullgren funnel, plus (hopefully) mass sampling of species from compost heaps and leaf litter. We also hope to encourage those with garden ponds, or those active in aquatic entomology to record or sample water-borne springtails, and encourage people to set up mini-refugia in their gardens and to record (or sample) the springtails that use them.

Though the data we collect will be at a high resolution (at least to monad level (1 km x 1 km) with the majority of records down to a 100 m resolution) the Atlas itself will be recorded at hectad level (10 km x 10 km) for two sensible reasons ;

1) Springtails seem not to recognise habitats in the way we recognise them on the whole and so don't distinguish calcareous habitats from acid ones, and have never read the NVC handbooks, but rather acknowledge the wider substrates such as vegetation in dry, wet, and rotting forms, water, soil etc. This also means they are prone to human re-distribution via our everyday activities.

2) Time and scale: Having visited every of the 900 plus Shropshire tetrads during the preparation of *Shropshire Craneflies* (Boardman, in prep) it is not something I feel that can be repeated without significant financial and logistical support. I travelled over 7,000 miles in Shropshire during 2012 recording craneflies!, but when I did that I was able to do it from within an incredibly supportive salaried position. This is not the scale of something I will be able to do in my current job, though I'm sure I will manage some work time recording.

Why get involved? Well that is simple. You will be making a true scientific contribution. Already the work that myself, Sue and Gwyn have done has produced a species new to the United Kingdom, many new county records and caused a minor international incident between the UK Springtail Recorder based in London, and the world foremost expert based in Belgium. What more could you want?

By the time this article goes to print some of you will have seen my introductory talk at Shropshire Entomology Day and may already be collecting springtails from your compost heaps and gardens. Also some may have been out with us to Colemere to learn some springtail field craft. Certainly there will be more opportunities during the 2016 field season and these will be advertised via the tom.bio project. Please do join us!

Orchesella villosa showing different forms of hairiness (photo: Pete Boardman)

Riffle beetles (Coleoptera: Elmidae), unseen indicators of clean waters

Frances Riding

Riffle beetles (elmids) are frequent members of the aquatic community of running water. There are 46 species in Europe but the number grows less towards the west with Britain having only 12 species (Elliot, 2008). Within Shropshire that falls to nine species with four being common and with recent records, and five being uncommon, with four having only two or three old (25+ yrs) records each.

Elmid beetles in Britain spend all their lives submerged, except for pupation which occurs in soil or under stones near water. The larvae have five to eight instars depending on genus. The adults return to water on emergence and their body is covered by a thin layer of air which acts as a gill. This plastron is held in place by hydrofugic (non wetting) hairs on the ventral side and as oxygen is used up it is replaced by diffusion of oxygen from the surrounding water. Adult beetles retain this plastron and are therefore able to remain submerged in well oxygenated water without having to re-surface.

As their common name suggests riffle beetles live in running water with the majority to be found in well aerated streams and rivers. In lakes elmids can sometimes be found under stones on wave washed shores. Elmids are negatively affected by acidification and pollution (Nilsson, 1996).

Photo 1. *Macronychus quadrituberculatus* (2.6 – 3.6 mm).
(photo: М.Э. Смирнов)

Photo 2. *Elmis aenea* (2.1 mm)

Most beetles are less than 3mm long with none more than about 4.7 mm. (Holland, 1972). They are rarely found beyond a depth of two feet and usually a lot shallower. Apart from *Macronychus quadrituberculatus* (Müller, P.W.J., 1806) (photo 1) the other Shropshire elmids are to be found amongst the gravel on the stream bed. *Elmis aenea* (Müller, P.W.J., 1806) (photo 2) can also be found on macrophytes and bryophytes as well as under stones.

Distribution of the four common beetle species reflects the distribution of the fast flowing and stony rivers and streams in Shropshire. The northern distribution is mainly the River Dee and River Tanat with the southern being the Rivers Teme, Clun and Onny as well as the streams on the Long Mynd. *Macronychus quadrituberculatus* has its own habitat within the River Severn north of Shrewsbury. The larvae chew grooves in submerged wood and the adults can be found clinging to drowned branches and submerged logs. *M. quadrituberculatus* is classed as Near Threatened (Foster, 2010).

The four common species in Shropshire are *Elmis aenea, Limnius volckmari* (Panzer, 1793) (photo 3), *Esolus parallelepipedus* (Müller, P.W.J., 1806) (photo 4) and *Oulimnius tuberculatus* (Müller, P.W.J., 1806) (photo 5). Apart from *M. quadrituberculatus* the other uncommon species are *Normandia nitens* (Müller, P.W.J., 1817), *Riolus subviolaceus* (Müller, P.W.J., 1817), *Riolus cupreus* (Müller, P.W.J., 1806) and *Oulimnius troglodytes* (Gyllenhal, 1827). These four have only been found in the River Teme with *Riolus cupreus* found in the Clun and their records

Photo 3. *Limnius volckmari* (3.00 mm)
(photo. K.V. Makarov)

Photo 4. *Esolus parallelepipedus* (1.4 mm)

are from the 1980s. *Normandia nitens* is classed as Endangered and the other three as Nationally Scarce (Foster, 2010).

Photo 5. *Oulimnius tuberculatus* (1.9 mm)

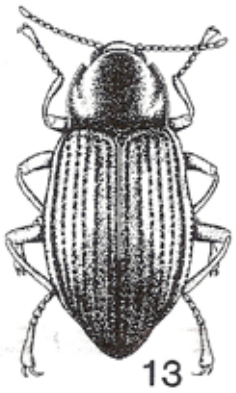

Fig 1. *Normandia nitens* (1.85 mm) (copied from Nilsson, 1996)

Although *M. quadrituberculatus* has sites on the R. Severn there is more of the Severn to be searched to find possible new sites for this species. Also, the main rivers have been looked at in a general way and the beetles recorded, but there are many more streams and river sections to be recorded to get a fuller picture of these important little insects.

Question. Is *Normandia nitens* still resident? Maybe next year I will have answered that question.

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The ins and outs of a caterpillar

Graham Wenman

On 23 August 2015, I was visiting a site which is reasonably local to me here in Church Stretton where, in 2014, we had discovered a new location for argent & sable *Rheumaptera hastata (L, 1758)*. They have been seen again this year so our objective was to look for possible feeding signs of larvae, but we were unsuccessful.

However, amongst other finds, such as leaf miners and day flying moths and butterflies, I found a larva which I did not recognise. I took it home for research purposes and it turned out to be a coxcomb prominent, *Ptilodon capucina* (L, 1758). The reason I had not recognised the larva was that it was not sitting in the characteristic "begging" posture.

Fig 1. Coxcomb prominent larva, 23.viii.2015) (photo: GJ Wenman)

On 28 August I was inspecting some of my recent finds and discovered that the larva had clearly been parasitised – possibly why it had not been sitting in characteristic pose? – and Fig. 2 is what I found.

Fig. 2 Remains of coxcomb larva, 28.viii.2015) (photo: GJ Wenman)

As a complete non-expert on parasites, I was advised to contact Mark Shaw, who is a renowned expert on such things and he has kindly 'educated' me on a small part of this complex world.

At first sight it appears that the larvae of the parasite have exited the coxcomb larva and pupated. But, the fact is that these are the larvae (not pupae) of the parasite.

He informed me that the parasite was a chalcid, *Eulophus ramicornis* (Fabricius, 1781) (Eulophidae). Not only that, but it is a koinobiont ectoparasitoid species – which means that its host is still able to feed, move and look after itself after being attacked (i.e. the moment of oviposition). This is the opposite of idiobiont, where the host is killed or immobilised.

You will have noticed that it is described as ectoparasitoid as opposed to endoparasitoid. This is because the chalcid has laid its eggs externally on the intersegmental membranes of the coxcomb larva and not internally – though I could not see them on any of my photos.

On 5 September I took the photograph shown in Fig. 3. This shows the chalcid larvae which have now become black pupae. In addition it shows the small brown "balls" at the outer edge, which are in fact, the faeces of the chalcid larvae which have been stored inside them up to the moment of pupation. The larval skin can also be seen although it is very flimsy.

The fact that these pupae are black is also of interest. This chalcid is biivoltine and has a strategy for survival and depending on the time of year produces either black or brown pupae. The black ones would normally drop off the leaf and be dispersed by the wind and depending on circumstances would not all hatch out at the same time after overwintering. Pupae with brown skins stick to the leaf, and thus all have similar circumstances and hatch earlier. The male/female mix differs between the two types.

I am looking forward to the hatching of these pupae so that the cycle is complete.

I know that all of this data is out there in the learned journals, and I guess that some of you have seen a similar process to the one I have described. However I hope that this may lead some of you to expand your interests of peripheral subjects concerning Lepidoptera.

Fig. 3. Pupae of *Eulophus*, showing faeces. 5.ix.2015) (photo: GJ Wenman)

I am indebted to Mark for his help and patience as I tried to grasp the intricacies of this interesting subject. He has produced several papers which you can find on the internet.

Shropshire Ephemeroptera - mayflies

Ian Thompson

To date very few records have been received for 2015 but I hope more will be available by the end of the year.

Little work has been carried out on updating the vice-county database since the last *Shropshire Entomology* issue in March, 2015. There is still a lot of work required to complete the incorporation of the Environment Agency records.

In *Shropshire Entomology* issues 9 & 10 I have reported on the yellow mayfly *Potamanthus luteus* (Linneaus, 1767). In discussions with the Environment Agency senior environmental monitoring officer last April I understand that this rare insect is now found in the River Severn from Bridgnorth up to Coalport so it appears that we have an established and viable population in the county. If anybody is visiting the Severn along this part of its course, or the lower reaches of its tributaries, please keep a lookout for this distinctive species (see issue 10 for photographs) whose normal emergence period is between May and July. Please note that a good photograph which shows eyes, wings and tails or a voucher specimen will be required for acceptance of records.

Third species of earwig confirmed in the county

David Williams

Two species of earwig (order: Dermaptera) are widespread in Britain: the ubiquitous common earwig, *Forficula auricularia* (Linnaeus, 1758) and the extremely under-recorded lesser earwig, *Labia minor* (Linnaeus, 1758). Both are present in Shropshire. The presence in Shropshire of a third species, Lesne's earwig, *Forficula lesnei* (Finot, 1887) rested on three records made by the same recorder, all from Severn Valley County Park, in 1997. Having been to that location numerous times myself and searched in vain, I must admit that I was inclined to doubt the accuracy of those sightings. My doubts were reinforced by the seeming absence of *F. lesnei* from north Worcs, records being confined to the south of that county. Lesne's earwig is southern in its national distribution, the Shropshire records appearing as a northern outlier on the western side of Britain.

Well, it turns out that I was wrong to doubt those Severn Valley Country Park records. For a start, the recorder (Chris Timmins) seems to be a national authority on the species. Then, in May, the Shropshire Moth Group (SMoG) held a trapping night at Eardington Quarry nature reserve. Whilst waiting for darkness to fall, Keith Fowler began beating the trees and shrubs. I was standing beside him when he induced a female *F. lesnei* to part company with the Scots pine *Pinus sylvestris* (L) in which she was residing. Subsequent visits to Eardington Quarry have revealed a large colony of the species, to the extent that it seems to greatly outnumber *F. auricularia* at the site.

In light of this further presence in the Severn Valley corridor, I decided to contact the Worcestershire County Recorder, Gary Farmer. He, in turn, contacted the Wyre Forest Study Group. Within a couple of weeks, Brett Westwood reported finding *F. lesnei* in large numbers in the Bewdley area, an area previously searched without success by Gary (G. Farmer pers. comm.).

Is the species spreading northwards? The Eardington records now represent the most northerly records on the west side of Britain. I have searched further north along the Severn, so far without success (but bear in mind my continued failure to re-discover the insect at Severn Valley CP). Though superficially similar in appearance to *F. auricularia*, identification is quite straightforward. Nevertheless, earwigs are so generally ignored that casual misidentification is possible. I note that there are several old records of *F. auricularia* from Eardington, but none of the much more numerous *F. lesnei*. To this end, I have produced a simple visual guide to Shropshire's three earwigs, which can be found here: http://www.invertebrate-challenge.org.uk/media/2125578/shropshires-earwigs.pdf

Male Lesne's earwig, Eardington Quarry (photo: D. W. Williams).

Female Lesne's earwig, Eardington Quarry (photo: D. W. Williams).

Shropshire ladybirds

Ian Thompson

As I write this it is still too early to comment on the records for 2015, details of which will have to wait until the spring issue of *Shropshire Entomology*. I have only just received the first batch.

Caroline Uff tells me that in a "mixed bag of unidentified beetles" one specimen collected in 2011 may well be the non-ladybird coccinellid *Coccidula scutellata* (Herbst, 1783) which if confirmed will be another new species for the vice-county. This appears to be the only new or exciting find for this year of which I am currently aware.

I look forward to receiving your records.

Craneflies, a few steps forward

Pete Boardman

Regular readers will know that the production of *Shropshire Craneflies* (Boardman, *in prep*) has been ongoing for a while now as a follow up to *An Atlas and Account of the Craneflies of Shropshire* (Boardman, 2007). This new book seeks to give further information on the distribution of craneflies found in Shropshire but also begins to enable their identification by the inclusion of synoptic and dichotomous keys. To aid this there are around 600 figures including many photos of wing venation and other features helpful in identification.

Unfortunately some delay occurred around the time that the Invertebrate Challenge Project (and my own employment at FSC) ended, but with the generous support of the FSC I have been able to take forward the book and expect to have it ready for the publishers (FSC Publications) by the end of 2015, so a spring 2016 publication is likely. A slight further delay has been caused by my work on the JNCC Cranefly Status Review for Natural England. This has been a fairly major piece of work and the first attempt to update the status of this group of flies nationally since Falk, (1991). Despite the enormity of this task it has enabled me to glean several more interesting records for *Shropshire Craneflies*, and also incorporate the work that myself, Keith Fowler, Gordon Leel, Nigel Jones, Mike Shurmer, and Jim Cresswell have done through our fieldwork / sightings into the national picture. The Shropshire database currently (or at least up to the end of 2014) stood at approximately 10,000 cranefly records. These records are a very meaningful chunk of the national dataset of all craneflies recorded ever (about 7% of the national total) and I would hope that continued work could increase that over time to 10% or even higher). Several species that we have found in Shropshire are nationally significant and have enabled a better understanding of their autecology (such as *Idioptera linnei* Oosterbroek, 1992, *Phylidorea heterogyna* (Bergroth, 1913), *Lipsothrix nobilis* Loew, 1873, *Neolimnophila carteri* (Tonnoir in Goetghebuer & Tonnoir, 1921), *Molophilus lackschewitzianus* Alexander, 1953, *Dicranomyia nigristigma* Nielsen, 1919, and *D. aperta* Wahlgren, 1904 to name but a few.

Limonia nubeculosa with a phoretic mite (photo: Pete Boardman)

So 2016 will be a big year for craneflies with the National Review and *Shropshire Craneflies* published. I'm hopeful this will lead to more interest in this group, and more people recording them. *Shropshire Craneflies* only really scratches the surface of the distribution of many of our species and there are so many unanswered questions such as; what is the fauna of Brown Clee (there are virtually no records from here)? Are the important species of craneflies in the Ironbridge dingle woodlands found by Andy Godfrey 15 years ago still there? Many of our best nature reserves are still massively under-recorded; Catherton Common, the Shropshire part of the Wyre Forest, the Oswestry Hills sites like Sweeney Fen, Llynclys Common, Jones' Rough, Trefonen, etc. What are the former forested sites in the Clun uplands like for craneflies? Many of our river corridors (and river sediments) have few records but should be really rich sites such as the River Clun, Teme, Tern, Vrynwy, Camlad etc. even the River Severn is poorly surveyed. Are there more sites with seepages, wet sands, and tufa-formation that have yet to be surveyed – almost certainly yes! Then there are species-specific questions to be answered; why has *Dicranomyia ornata* (Meigen, 1818) only ever been found twice in Shropshire when it is associated with butterbur, a common plant by streams etc? How widespread is *D. aperta*? Elsewhere in the UK it is known from calcareous fens with plants like grass of Parnassus, but it was found in Shropshire at a barely calcareous

Wing detail of *Tipula vittata* (photo: Pete Boardman)

tiny seepage on the Long Mynd. Is *Triogma trisulcata* (Schummel, 1829) (first found by Mike Shurmer in 2015) more widespread on the Long Mynd, and indeed, within the Meres and Mosses? How widespread is *Tanyptera nigricornis* (Meigen, 1818) and will ash dieback affect it positively or negatively in the near future? How widespread is our only true flightless species *Molophilus ater* (Meigen, 1804) in the Shropshire uplands? Indeed there are many, many more questions to be posed and investigated.

If you would like to get involved with identifying and recording craneflies in Shropshire do get in touch. This Atlas may seem like the end of the process, but honestly, it is just the beginning!

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Paradelphomyia nielsen (Kuntze, 1919) and some other interesting cranefly finds

Keith Fowler

Early in September The Joy of Wildlife group visited the Shropshire Wildlife Reserve at Masons's Bank, an area of old heathland that is regenerating

Nigel Cane-Honeysett with a "Super-pooter" (photo: K. Fowler)

following the clear-felling of a conifer plantation. Having spent the morning in the reserve we crossed the road and followed the public footpath that runs close to the River Unk in its upper reaches.

The footpath soon took us to a seepage with lush vegetation where we sampled for invertebrates using a "Super-pooter". This is a garden leaf blower which had been adapted so that it can be used to suck objects into a net placed in the extended inlet to the machine. Samples taken are emptied then inspected in a large white tray.

Amongst the many insects found were a couple of small pale craneflies, one male and one female. These were collected and taken home for identification.

A combination of characters including its wing venation (although the M1 M2 fork was missing), size, colour, darker stripe on the pleurae and hairs on the tips of its wings indicated a species of *Paradelphomyia*. The stripes on its thorax and

Paradelphomyia nielseni – male: pleura (top left); thorax (middle left); wing (top right); a female (probably – caught at the same time) bottom. (photos: Nigel Jones)

narrow anal cell indicated the Nationally scarce *Paradelphomyia nielseni*. The specimen was examined by Pete Boardman who confirmed the identification.

Identification of the male can be confirmed on the genital characteristics as illustrated in the CRS Test Key (1991). Unfortunately the aedeagus was not as illustrated but appeared to be curled up within the abdomen. Kramer (2015) states that this has been the case in other specimens so care needs to be taken when drawing conclusions from this characteristic; it is not as clear cut as the key implies.

The only record for Shropshire in Boardman (2007) is from Fenn's, Whixall & Bettisfield Mosses NNR where it was recorded by Wallace Pugh in 1932. The only other record since that publication was one found by Pete Boardman at Spout Wood, near Ellesmere, in 2006 (Boardman, in prep.).

Kramer (2015) states that the fly is widely distributed and is recorded as flying in wet woodland from July to September with the main peak in August. These specimens were from long wet grassland at the top of a seepage that eventually feeds into the River Unk. There were a few bushes about but there was no woodland in the immediate vicinity although the tree cover does increase as the main river is approached.

My thanks to Pete Boardman for confirming the identification; Tony Jacques for providing the super-pooter; Nigel Cane-Honeysett for wielding it and FSC for allowing me to use their photographic equipment.

A couple of other interesting finds, both late in September this year, have been *Pedicia straminella* (Meigen, 1838) found in the vegetation of the wet flush in the upper reaches of Ashes Hollow on Long Mynd and *Scleroprocta sororcula* (Zetterstedt, 1851) in mixed woodland at Abbey Wood, Lilleshall.

Pedicia straminea (photo: Keith Fowler)

Scleroprocta sororcula (photo: Keith Fowler)

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Cramer, J. 2015. Dipterists Digest 2015 Volume 22, No. 1, *A Review of the genus Paradelphomyia Alexander (Diptera, Limoniidae) in Britain* (pages 43-57).

Cranefly Recording Scheme, 1991. *Test Key to Subfamily Limnophilinae*

Pot beetles and selected finds from 2015

Caroline Uff

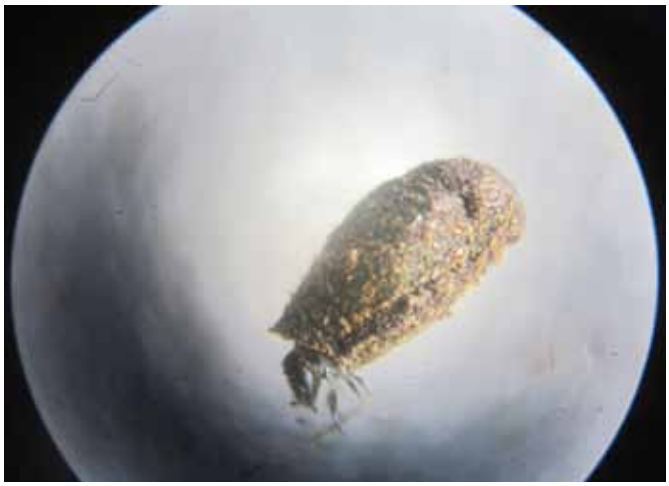
Not all the 2015 records are in yet, but we already have an amazing 26 new species for the county! This is in no small part due to Dan Knight's work on some of the lesser recorded groups, including his identification of weevil leaf mines. In Dolgoch quarry, for example, *Pseudorchestes pratensis* (Germar, 1821) (Nb) larvae were found in tenanted leaf mines on common knapweed. Earlier this year, Dan also recorded the beautiful green and copper wetland ground beetle *Chlaenius nigricornis* (Fabricius, 1787) (Nb), a species that has eluded Shropshire recorders until now.

Alder leaf beetle (photo: M. Justamond)

Another distinctive new county species is the alder leaf beetle, *Agelastica alni* (Linnaeus, 1758) (RDBK). M. Justamond was the first to record this from Whixhall Moss, followed by two records from Lea Quarry (S. Mitchell and N. Cane-Honeysett). Usually associated with alder carr, this beetle was listed as 'presumed extinct' in the 1980s. However, in recent years, the numbers have picked up and David Hubble is currently monitoring its rapid spread across the country.

For me, the highlight was finding a larval 'pot' of the leaf beetle, *Cryptocephalus fulvus* (Goeze, 1777) which I reared to adulthood and released. The *Cryptocephalus* are also known as pot beetles because the larvae are protected by a case or 'pot' which they carry around with them. The adults are often distinctly coloured and their head usually hidden by a shiny hood-like pronotum. Eight

Cryptocephalus fulvus' pot on the food plant - sheep's sorrel (photo: C. Uff)



Crytocephalus fulvus larva (photo: C. Uff)

species have been recorded in Shropshire. The most commonly recorded species is *C. pusillus* Fabricius, 1777 (20 county records). All of the others are only infrequently recorded, but, despite this, in 2015 we recorded 5 of the species. These were *C. pusillus* (recorded by D. Knight, C. Uff), *C. moraei* (Linnaeus, 1758) (J. Cresswell, C.Uff), *C. labiatus* (Linnaeus, 1761) (D. Knight), *C. fulvus* (C. Uff) and *C. bipunctatus* (Linnaeus, 1758) Nb (D. Knight).

Cryptocephalus moraei (photo: C. Uff)

Cryptocephalus bipunctatus (photo: C.Uff)

Finally, other findings worthy of note include the bee beetle, *Trichius faciatus* (Linnaeus, 1758) found by G. Hiatt in Bucknell Wood, and wasp beetle *Metoecus paradoxus* (Linnaeus, 1761) found at Dudmaston by D. Williams. It also seemed to be a good year for the lesser stag beetle, *Dorcus parallelipipedus* (Linnaeus, 1758) which was found at five sites across the county this year, and, as ever, there was an excellent array of species associated with ancient trees and dead wood. I heard last

Lesser stag beetle (photo: D. Wrench)

month the worrying news that ash die-back had been confirmed in two sites in Shropshire. It got me wondering how this would impact upon the saproxylic species. Positively, I expect - it's an ill wind that blows nobody good!

Shropshire's newest aculeate

Nigel Jones

The intensive survey work undertaken for the Shropshire bees, wasps and ants atlas (Jones & Cheeseborough, 2014) added numbers of new species to the Shropshire list each year. Following publication, 2015 has been a more restful year and consequently just a single species was added to the list. *Spilomena troglodytes* (Vander Linden, 1829) is one of our smallest aculeates. It is reputedly the commonest member of its genus in Britain and whilst Shropshire had records for its reputedly scarce cousins *S. beata* Blüthgen,1953 and *S. curruca* (Dahlbom,1844), it was surprising that *S. troglodytes* had never been recorded in the county. Even more surprising was my sudden discovery of *S. troglodytes* at three locations during a 12 day period in 2015. On 4 July a single specimen was swept from poplar leaves in Longden Road Cemetery, Shrewsbury; six days later (10 July) another individual was taken at the Preston Montford Field Studies Council grounds, then a third specimen was collected from Hollies Wood, Haughmond Hill on 16 July. The Shropshire aculeate list now stands at 320.

Jones, N.P. & Cheeseborough, I. (2014) *A Provisional Atlas of the Bees, Wasps and Ants of Shropshire,* Field Studies Council, Telford.

Photo: *Spilomena troglodytes* specimen from Longden Road Cemetery, Shrewsbury (photo: Nigel Jones)

Joy of Wildlife walks

Keith Fowler

Another year, another rebranding exercise as the regular Wednesday walks became the "Joy of Wildlife" walks. Why change the name again? The answer lies in what we look for and record. It is not just invertebrates. We record the flora, birds and, well, anything else we can identify. So why not reflect what we do in a more all embracing name?

An additional feature this year has been the support provided by the FSC as part of the legacy of Invertebrate Challenge. These walks would not have started had it not been for the opportunities that this marvellous project gave me and many others, so it is great that the FSC has continued its support for their former students. Thank you.

I have no intention in this brief report of detailing all our trips as reports of most of these can be found on the Wrekin Forest Volunteers blog (at http://wrekinforestvolunteers.blogspot.co.uk/ . I will just pick out a few highlights.

In February we visited Lea Quarry on the Wenlock Edge. The site was extremely picturesque as it was covered in snow! We did not record very much. There were no snow fleas about. However we were entertained by the local hunt as one of the huntsmen in full regalia tried to retrieve his pack of hounds from the industrial site bordered by the quarry.

We visited Lea Quarry throughout the year and it was interesting to observe the flora of the site change over that time as dominant flowers came and went and were replaced by others. It also provided us with sightings of many butterflies including dark green and silver washed fritillaries, marbled white, wall, green hairstreak and dingy skipper.

Devil's Dingle, the ash disposal site for Buildwas Power Station, hosted us twice. As well as delighting in the excellent range of fauna supported on the site we were able to marvel at the views.

A view from Devil's Dingle 29 April 2015
(photo: Keith Fowler)

What will become of this site? Our contact, the ecology officer, Mary Thornton is to be made redundant at the end of the year, reminding us all yet again of the reality of the world out there. I have a new contact for next year but will access continue to be given in Mary's absence?

On a lovely May day we visited Nant Mawr Visitor Centre. This site is based around an old railway line and kilns. The site was a gem and we were able to record over 200 species for the day including grizzled skipper.

The site had the added bonus of providing plenty of places to sit down and rest. It is not often one can

Wall butterfly at Lea Quarry 17 June 2015
(photo: Keith Fowler)

Grizzled skipper at Nant Mawr (photo: Keith Fowler)

Taking a breather (photo: Keith Fowler)

safely take time out on a railway line!

My "favourite" find of the year was the bee chafer *Trichius fasciatus*.

Trichius fasciatus (photo: David Williams)

To be fair the chafer found us as we were chasing butterflies and other insects at Bucknell Wood in June. It landed in a tray; a nifty bit of net-work by one of the group ensured it did not escape. Fortunately we had enough literature with us to be able to identify it in the field. It displayed the key identification feature of a small tooth on the mid-tibia (sorry, it is not visible on the above photograph) that separates it from other members of the genus. A lovely creature and we were able to liberate it close to where it was found.

Unfortunately there was no joy when we visited Granville Country Park. Although the day got off to a good start it had to be aborted when a couple informed us that our cars had been broken into. We returned to the car park to find several of the cars with broken windows as thieves had looked for things of value. As it turned out little was stolen but a lot of damage was caused and it created a great deal of inconvenience and expense for the victims.

I will not dwell on the above incident as overall I believe it has been a very successful year. We made over 30 trips making around 3,000 records of over 1,200 species that should work there way to the various county recorders in due course.

To me the statistics are not that important, it is the word "Joy". The statistics mask the real aim of the walks – to enjoy what the natural world and the company of others provide. I hope that the forty or so individuals who have joined me on the walks over the year have done so.

With that aim in mind one of my favourite moments of the year is captured by the following photograph. As I approached the group I just about resisted breaking into a rendition of the theme from "The Last of the Summer Wine".

Compo and co. (photo: Keith Fowler)

Thank you to all who have attended these walks and also to all the organisations and individuals who have supported the activity.

The ivy bee, *Colletes hederae* (Schmidt & Westrich, 1993) in Shropshire

David Williams

Described as new to science as recently as 1993, the ivy bee was first recorded in mainland Britain (in Dorset) in 2001 (Falk, 2015). It was first recorded in Shropshire in 2013, when Nigel Jones found it in Shrewsbury. It has re-appeared each year since, at the same locations in the town. This year, I thought that I should make the pilgrimage to the county town to see it. Nigel pointed me in the right direction and on 26 September we duly found ourselves standing in the gutter in Kingsland Road, staring at a hedge and causing a minor traffic disturbance (there being no pavement on that side of the road). Though the ivy was still only in the early stages of flowering, the bees were present in good numbers.

At that point in time, the species had never been found in Shropshire anywhere other than Shrewsbury, and no nest sites were known in the county. However, within a few days I received an email from Nigel to say that a nesting aggregation had been discovered at Venus Bank sand quarry. So the next weekend I found myself again following Nigel's directions, this time to the appropriate part of the quarry. A good number of bees were present, the buzzing being audible from several metres away. They are considerably more difficult to photograph at the nest than when foraging, as they land and quickly disappear into their burrows. However, I did manage to photograph and video a female excavating a fresh burrow. I note that she had collected full pollen loads before beginning to dig.

What a thrill to see this large, handsome species. Thanks Nigel!

Female ivy bee nectaring, Shrewsbury, 26/9/15 (photo: D. W. Williams).

Female ivy bee entering nest burrow, Venus Bank, 4/10/15 (photo: D. W. Williams).

Female ivy bee excavating nest burrow, Venus Bank, 4/10/15 (photo: D. W. Williams).

Reference

Falk, S & Lewington, R, (2015). *Field Guide to the Bees of Great Britain and Ireland.* Bloomsbury Publishing PLC, London

A journey of discovery. the heath assassin bug in Shropshire

Ben Waddams

I sat bolt upright in my camp bed. Something had woken me, but what? My sister had done the same. "What was that?" she hissed in a frightened tone. "No idea", I unhelpfully answered. Then we heard it, a shot rang out shattering the serene Botswana night. Silence returned followed by the screech of a night owl and the grunting of a hippo in the reeds and elephant grass of the Okavango beyond.

With morning came an explanation from the camp manager. A young boy had been in a tent some 500m from where we slept. Upon hearing a commotion outside, he'd stuck his head out to investigate and had been taken by a hyena. The first shot (that had awoken us) was the guide trying and failing to stop the attack; the second was to dispatch the hyena.

For the remainder of our stay in the bush, I stuck markedly to the periphery of the campfire at night. However apparently I was not even safe there. In the flickering light of the flames upon the bark of an acacia I noticed a small movement. On investigation it turned out to be a rather beautiful and rather large insect with a flattened abdomen marked by two white spots (*Platymeris biguttatus* (Linnaeus, 1767), interestingly, to the best of my knowledge, not recorded in Botswana before) and moving in a manner I can only describe as 'intelligent'.

I allowed it to clamber onto my hand and presented it, after a visual inspection, to our ranger guide. "Ben, if I were you I'd put that down sharpish". Not one to argue with a seasoned professional, I obeyed, gently returning the insect to its bark. I was then given a friendly yet earnest lecture on the vagaries of assassin bugs, their bite power, diseases and ability to 'spit' venom if 'disturbed'. I think I was vindicated in my thinking that most things in Africa were intent upon your destruction after that trip, but from that moment on I held assassin bugs in high regard.

That was 15 years ago and now I was knee deep in rotting sphagnum on a blustery, autumnal Shropshire morn upon Whixall Moss on the Welsh border. I had been trying to photograph and film sundews for a piece I had written on them at home and with a looming editorial deadline imminent, I was currently minus an illustration. I had enthusiastically penned a description of how, usually in tropical climes, the sundew may be beset by assassin bugs, eager to steal the dying insects from the grasp of the plant's leaves, but as I glanced my first *Drosera rotundifolia* I saw, to my amazement, an assassin bug patiently circling it.

Assuming they were common here I took a couple of snaps, returned the bug (a true description of such an insect for once!) to its plant and, considering it wasn't the absolute prime example of its species, moved off to find another sundew.

Only on my return home and with some help from Gareth Egarr at the Wildlife Trust and Nigel Jones and Keith Fowler, did I realise my mistake. Assassin bugs were not at all common in Shropshire and the one I had seen, a heath assassin bug *Coranus subapterus* (DeGeer, 1773) was in fact a new species to the county. I was delighted of course but my elation was somewhat tempered by the realisation that I had forgotten to include a rather vital bit of kit amongst my camera gear…a memory card. I returned some days later but could find no trace of the bug. I was also informed that the species had been recorded within the Welsh reaches of the area. That meant I had stumbled across this 'new species' a mere 200m down the track from where it is well known. If I recount this story in the future, I might omit that particular detail.

Coranus apterus British Entomology Volume 7 (John Curtis) Extract from Plate 453

The County Recorder Network

This information is accurate at the time of press. All these people carry out their roles as volunteers and we are indebted to their hard work.

Lepidoptera (butterflies and moths)

Butterflies – Tony Jacques Email: b-mcvc40@talktalk.net

Macro-moths – Tony Jacques Email: b-mcvc40@talktalk.net

Micro-moths – Godfrey Blunt Email: blunt.sig195@btinternet.com

Odonata (damselflies and dragonflies)

Dragonflies and damselflies (Odonata) Sue McLamb – Email: mclamb1@btinternet.com

Hemiptera (true bugs)

Terrestrial Bugs (now including shieldbugs), the Auchenorrhyncha and Psylloidea (Hemiptera) – Keith Fowler – Email: keith.c.fowler@blueyonder.co.uk

Aquatic Bugs (Hemiptera) – Frances Riding Email: franrid@hotmail.com

Coleoptera (beetles)

All families except Ladybirds and water beetles – Caroline Uff – Email: caroline.uff@nationaltrust.org.uk

Ladybirds (Coccinellidae) – Ian Thompson – Email: salopladybirds@f2s.com

Water beetles – Frances Riding – Email: franrid@hotmail.com

Diptera (true flies)

Brachyceran flies (Empidid flies, hoverflies, robber flies, horse flies, soldier flies, tachinid flies, conopid flies, picture-winged flies etc) – Nigel Jones Email: nipajones@tiscali.co.uk

Nematoceran flies (craneflies, winter gnats, bibionids, mosquitoes, etc) – Pete Boardman – Email: peteboardman@rocketmail.com

Leaf-mining flies (Agromyzidae) – Godfrey Blunt Email: blunt.sig195@btinternet.com

Hymenoptera (bees, wasps, ants etc)

Aculeates (bees, wasps and ants) and sawflies (symphyta) – Ian Cheeseborough – Email: crossocerus1@gmail.com

Aquatic insects

Mayflies (Ephemeroptera) - Ian Thompson – Email: salopladybirds@f2s.com

Trichocera (Caddisflies) and Plecoptera (Stoneflies) – Frances Riding – Email: franrid@hotmail.com

Orthopteroids

Orthopteroids (Grasshoppers, Crickets, Ground hoppers, Earwigs etc) – David Williams Email: dw1971@btinternet.com

Arachnids

Spiders Harvestman Pseudoscorpions – The Shropshire Spider Group – Email: nigel@canehoneysett.plus.com

Hexapods

Collembola (Springtails) – Francisca Sconce – Email: fsconce@harper-adams.ac.uk and Pete Boardman – Email: peteboardman@rocketmail.com

Others

Plant Galls (of whichever taxonomic order including mites) – Godfrey Blunt Email: blunt.sig195@btinternet.com